CC-VEx Weather Outlook -- Valid 1800 UTC/1400 EDT Tuesday 25 July 2006

Upcoming CloudSat-CALIPISO Overpass Scenarios (times are approximate):

Wed 26 July – Initial ER2 ferry from Dryden→KWRB, arriving GA in conjunction w/ 1800 UTC overpass from W coast FL → MS-GA-TN tri-state border
Thu 27 July: Mandatory no-fly day for ER2
Fri 28 July: 1845 UTC overpass up E coast FL

Discussion:

Significant meteorological features over the CC-VEx region today include (1) a zone of baroclinically-induced convection off the mid-Atlantic coast associated with a wave whose passage was responsible for yesterday afternoon's active weather over Warner Robins (WRB); (2) seabreeze convection in the FL panhandle and more isolated buildups in the moisture-rich, unstable environment across south GA; and most notably (3) a large area of intense convection and interspersed stratiform cloud/precipitation straddling the western Gulf of Mexico coastline from just offshore of Brownsville to near New Orleans. This latter area corresponds to a landfalling tropical depression, which is associated with a well defined anticyclonic outflow signature aloft (cf. attached image). This divergent flow includes a significant east-bound feed of cirrus presently stretching along the coasts of LA-MS. This feed is expected to reach the FL panhandle overnight and is relevant to tomorrow's ~1900 UTC CALIPSO-CloudSat overpass. Convection straddling the TX-LA coast is expected to remain active well into tomorrow. Establishment of a progressively well defined subtropical ridge (separating subtropical E'lies from midlatitude W'lies) and a gradually building heights aloft may tend to limit the southward extent of these clouds with time, but prospects look good for considerable cirrus along the segment of tomorrow's overpass over and immediately north of the Florida panhandle. This zone appears to offer the best prospect for ER2-WMI Learjet coordination in conjunction with tomorrow's overpass.

Assuming tomorrow's ER2 ferry to WRB proceeds nominally, Thursday (27 July) will be a no-fly day. Looking toward the Friday 28 July's ~1845 UTC overpass located along the east coast of FL, no mechanism for large-scale convective organization is foreseen. The timing of this overpass near 1500 EDT does, however, imply that sampling of diurnal seabreeze-zone convective clouds remains a strong possibility.

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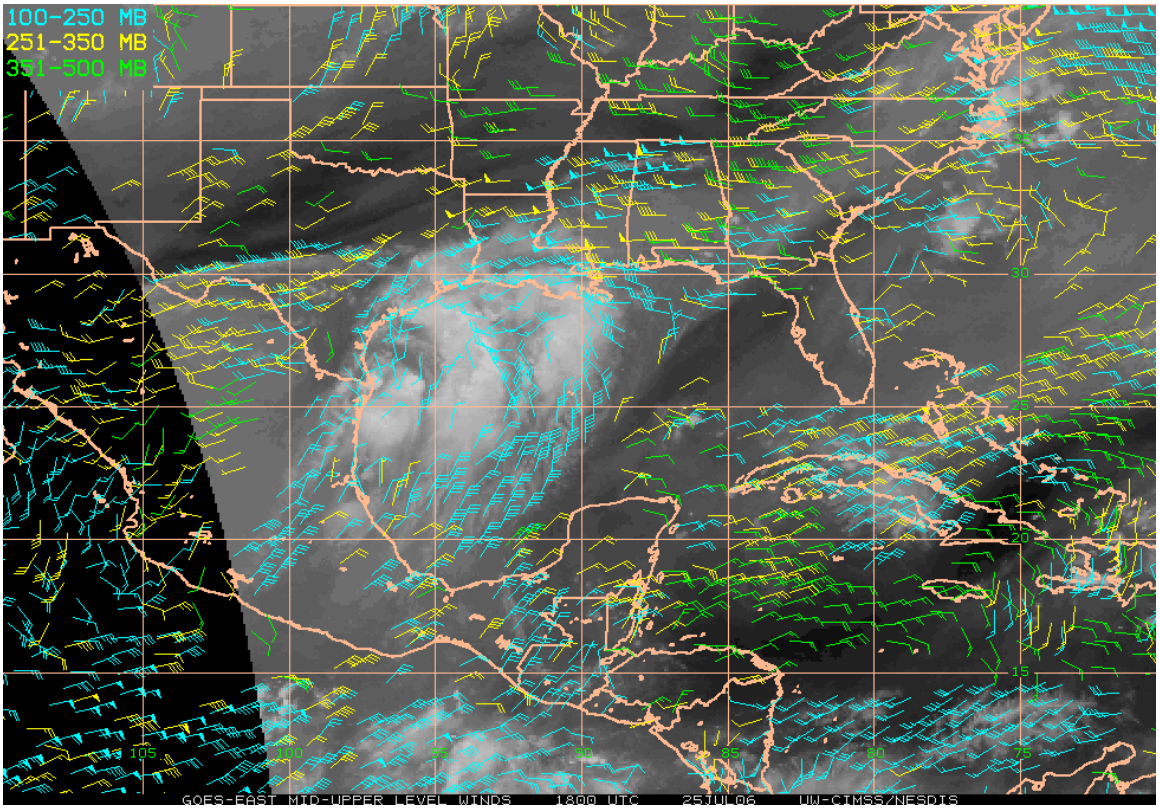
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GOES-EAST MID-UPPER LEVEL WINDS 1800 UTC 25JUL06 UW-CIMSS/NESDIS